

**ANTECEDENTS OF THE INTERNATIONALIZATION AND THE
RELATIONSHIP BETWEEN INTERNATIONALIZATION AND
PERFORMANCE OF MALAYSIAN SMALL AND MEDIUM
MANUFACTURING ENTERPRISES (SMEs)**

SHANKAR CHELLIAH

University Science of Malaysia

2004

**ANTECEDENTS OF THE INTERNATIONALIZATION AND THE
RELATIONSHIP BETWEEN INTERNATIONALIZATION AND
PERFORMANCE OF MALAYSIAN SMALL AND MEDIUM
MANUFACTURING ENTERPRISES (SMEs)**

SHANKAR CHELLIAH

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor
of Business Administration

2004

ACKNOWLEDGMENTS

I would like to take this opportunity to thank my supervisor, Prof. Mohamed Sulaiman who have provided great assistance and inspiration in completing this dissertation. I wish to thank Assoc. Prof. Osman Mohamad, Assoc. Prof. Subramaniam, Assoc. Prof. T. Ramayah, Assoc. Prof. Yuserrie Zainuddin, Prof. Daing Nasir Ibrahim, Assoc. Prof. Raja Azimah Raja Omar Ainuddin in the capacity of an external examiner and Assoc. Prof. Moha Asri Abdullah in the capacity of an internal examiner, for their enlightening remarks and constructive suggestions that have made this research even more fruitful and meaningful. Besides that, my father, the late K. Chelliah, had been a great source of motivation in both finance and education. My mother, P. Loganayaki, gave me love and mental support to pursue this post graduate study. In addition to that, my beloved wife K. Mangayarkarasi, rendered full support and great understanding throughout the duration of my studies. Last but not least, the support given by the respondents from the SMEs in returning the questionnaires in time helped me to complete my thesis.

TABLE OF CONTENTS

	<u>Page</u>
TITLE PAGE	i
ACKNOWLEDGMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vi
LIST OF FIGURES	viii
LIST OF APPENDICES	ix
LIST OF ABBREVIATIONS	x
ABSTRAK (MALAY)	xii
ABSTRACT	xiii
Chapter 1 INTRODUCTION	
1.1 Introduction	1
1.2 Research Issues	5
1.3 The Problem Statement	9
1.4 Research Objectives	9
1.5 Research Questions	9
1.6 Significance of the Study	10
1.7 Scope of the Study	11
1.8 The Operational Definition of Key Variables	11
1.8.1 Small and Medium Enterprises (SMEs)	11
1.8.2 Internationalization	12
1.8.3 Performance	12
1.8.4 Competitive Advantage	12
1.8.5 Management Attitude	13
1.8.6 International Knowledge and Experience	13
1.8.7 Firm Size	13
1.8.8 The Manufacturing Sector	14
1.9 The Organization of Chapters	14
Chapter 2 LITERATURE REVIEW	
2.1 Introduction	15
2.2 Small and Medium Enterprises in Malaysia	15
2.3 Internationalization	21
2.4 Firm Performance	33
2.5 Competitive Advantage	36
2.6 Management Attitude	47
2.7 International Knowledge and Experience	53
2.8 Firm Size	57
2.9 Conceptual Framework and Hypotheses	59
2.9.1 Gaps in the Previous Literature	59
2.9.2 The Conceptual Framework	62
2.9.3 Description of Variables	63

	2.9.4 Development of Hypotheses	72
	2.10 Summary	82
Chapter 3	METHOD OF RESEARCH	
	3.1 Introduction	83
	3.2 Population and Sample	83
	3.3 Design and Procedure	84
	3.4 Measures	85
	3.4.1 Measurement of Internationalization	85
	3.4.2 Measurement of Firm Performance	88
	3.4.3 Measurement of Competitive Advantage	88
	3.4.4 Measurement of Management Attitude	89
	3.4.5 Measurement of International Knowledge and Experience	89
	3.4.6 Measurement of Moderating Variable: Firm Size	90
	3.5 Statistical Analyses	90
	3.5.1 Descriptive Statistics	90
	3.5.2 Goodness of Data	90
	3.5.2.1 Validity	91
	3.5.2.2 The Reliability Analysis	92
	3.5.4 The Factor Independence Analysis	92
	3.5.5 The Tests for the Underlying Assumptions of Multiple Regression	92
	3.5.6 Hypotheses Testing The Hierarchical Multiple Regression Analysis	93
	3.5.7 Tests on Nonresponse Bias	94
	3.6 Summary	94
Chapter 4	RESULTS	
	4.1 Introduction	95
	4.2 Sample Profiles	95
	4.3 Descriptive Statistics of Competitive Advantage	97
	4.4 Descriptive Statistics of Management Attitude	99
	4.5 Descriptive Statistics of International Knowledge and Experience	101
	4.6 Descriptive Statistics of Internationalization	101
	4.7 Descriptive Statistics of Performance	103
	4.8 Descriptive Statistics of Size	105
	4.9 The Principal Component Factor Analysis	105
	4.10 Reliability Analysis Using Cronbach Alpha	107
	4.11 Sample Adequacy Using Kaiser-Meyer-Olkin (KMO)	109
	4.12 Development of Independent Variables for Statistical Analysis	109
	4.13 The Tests for the Underlying Assumptions of Multiple Regression	110
	4.14 Development of Index of Internationalization	110
	4.15 Development of Index of Performance	113
	4.16 Inferential Statistics: The Pearson Correlation	114
	4.17 Hypotheses Tests	115

4.17.1 Hypotheses Tests for H1, H2 and H3	115
4.17.2 Hypothesis Test for H4	117
4.17.3 Hypothesis Test for H5	121
4.17.4 Hypothesis Test for H6	124
4.17.5 Hypothesis Test for H7	125
4.17.6 Hypothesis Test for H8	126
4.18 Tests on Nonresponse Bias	129
4.19 Summary	131
Chapter 5 DISCUSSION AND CONCLUSION	
5.1 Introduction	133
5.2 Recapitulation of Study	133
5.3 Discussion	134
5.3.1 The relationship between competitive advantage and internationalization	135
5.3.2 The relationship between management attitude and internationalization	137
5.3.3 The relationship between international knowledge and experience and internationalization	139
5.3.4 Firm size as a moderator	140
5.3.5 The positive relationship between internationalization and performance	142
5.3.6 The positive relationship between competitive advantage, management attitude, international knowledge and experience and performance	144
5.4 Implications	146
5.4.1 Theoretical Implications	146
5.4.2 Practical Implications	148
5.5 Limitations	149
5.6 Suggestions for Future Research	152
5.7 Conclusions	154
References	156
Appendices	

LIST OF TABLES

Tables		<u>Page</u>
Table 1.1	Development Allocations for Industrial Development, 2001-2005	2
Table 2.1	Strategic Dimensions and Competitive Attributes	45
Table 2.2	Review of Selected Studies on Size and Export Behavior	59
Table 2.3	Competitive Advantage Variables	67
Table 2.4	The Constructs of International Knowledge and Experience	69
Table 2.5	Summary of Empirical Studies of the Relationship between Financial Performance and the Degree of Internationalization (DOI)	70
Table 3.1	Dimensions of Management Attitude	89
Table 3.2	Dimensions of International Knowledge and Experience	91
Table 4.1	Sample Company Profiles	98
Table 4.2	Mean and Standard Deviation of Independent Variables	100
Table 4.3	Internationalization of SMEs	101
Table 4.4	Firm Performance	104
Table 4.5	Firm Size	105
Table 4.6	Results of Factor Analysis and Reliability Analysis	108
Table 4.7	Weightages for Index of Internationalization	111
Table 4.8	Index of Internationalization	112
Table 4.9	Weightages for Index of Performance	113
Table 4.10	Index of Performance	114
Table 4.11	Correlation Analysis	116
Table 4.12	Multiple Regression Analysis: Internationalization	117
Table 4.13	Hierarchical Multiple Regression Analysis: Internationalization	120
Table 4.14	Hierarchical Multiple Regression Analysis: Firm Performance	123
Table 4.15	Regression Analysis: Firm Performance	124
Table 4.16	Multiple Regression Analysis: Firm Performance	126
Table 4.17	Hierarchical Hierarchical Multiple Regression Analysis: Firm Performance	129
Table 4.18	Chi-square Tests for Early and Late Respondents	130
Table 4.19	Independent Sample Test for Early and Late Respondents	131
Table 4.20	Summary of Hypotheses Testing	132

LIST OF FIGURES

Figure		<u>Page</u>
Figure 2.1.	The Conceptual Framework: Antecedents of the Internationalization and the Relationship between Internationalization and Performance of Small and Medium Manufacturing Enterprises (SMEs).	63
Figure 4.1.	Interactive Effect of Size, International Knowledge and Experience on Firm Internationalization.	119
Figure 4.2.	Interactive Effect of Size and Innovation Differentiation on Firm Performance.	122

..

LIST OF APPENDICES

Appendix No.	Titles	<u>Page</u>
APPENDIX A	APPENDIX A LETTERS SEND TO PARTICIPATING COMPANIES DURING DATA COLLECTION	Appendix-1
APPENDIX B	THE QUESTIONNAIRE	Appendix-3
APPENDIX C	FACTOR ANALYSIS ON COMPETITIVE ADVANTAGE, MANAGEMENT ATTITUDE AND INTERNATIONAL KNOWLEDGE AND EXPERIENCE	Appendix-12
APPENDIX D	TESTS FOR THE UNDERLYING ASSUMPTIONS OF MULTIPLE REGRESSION	Appendix-18
APPENDIX E	RELIABILITY TEST ANALYSES	Appendix-25
APPENDIX F	REGRESSION ANALYSES FOR HYPOTHESES 1, 2 AND 3	Appendix-31
APPENDIX G	HIERARCHICAL MULTIPLE REGRESSION ANALYSIS FOR HYPOTHESIS 4	Appendix-33
APPENDIX H	HIERARCHICAL MULTIPLE REGRESSION ANALYSIS FOR HYPOTHESIS 5	Appendix-37
APPENDIX I	REGRESSION ANALYSIS FOR HYPOTHESIS 6	Appendix-41
APPENDIX J	MULTIPLE REGRESSION ANALYSIS FOR HYPOTHESIS 7	Appendix-43
APPENDIX K	HIERARCHICAL MULTIPLE REGRESSION ANALYSIS FOR HYPOTHESIS 8	Appendix-45
APPENDIX L	NONRESPONSE BIAS TEST (CHI-SQUARE)	Appendix-48
APPENDIX M	NONRESPONSE BIAS TEST (<i>t</i> -TEST)	Appendix-52
APPENDIX N	LIST OF RESPONDENTS	Appendix-54

LIST OF ABBREVIATIONS

Variables	Abbreviations
Competitive Advantage	CA
Management Attitude	MA
International Knowledge and Experience	IKE
Index of Internationalization	IOI
Index of Performance	IOP
Statistical Package for Social Sciences	SPSS
Regression Mean Square	MSR
Enterpris Kecil dan Sederhana	EKS
Small and Medium Industries Development Corporation	SMIDEC
Small and Medium Industry Development Plan	SMIDP
Organization for Economic Cooperation and Development	OECD
World Trade Organization	WTO
Malaysian External Trade Development Corporation	MATRADE
ASEAN Free Trade Area	AFTA
Ministry of International Trade and Industry	MITI
Federation of Malaysian Manufacturers	FMM
Gross Domestic Product	GDP
SME Expert Advisory Panel	SEAP
Free Trade Agreement	FTA
Industrial Master Plan 2	IMP2
Seventh Malaysian Plan	7MP
Eighth Malaysian Plan	8MP
Degree of Internationalization	DOI
Foreign Sales as a percentage of Total Sales	FSTS
Foreign Assets as a percentage of Total Assets	FATA

Overseas Subsidiaries as a percentage of Total Subsidiaries	OSTS
Psychic Dispersion of International Operations	PDIO
Top Managers' International Experience	TMIE
Return on Sales	ROS
Return on Assets	ROA
Return on Equity	ROE
Foreign Employees/Total Employees	FETE
Foreign Offices/Total Offices).	FOTO
Information and Communication Technology	ICT
Information Technology	IT
Information Systems	IS
Research and Development	R&D
Chief Executive Officer	CEO
Business Performance Composite Index	BPCI
Return on Investments	ROI
Measure of the Sampling Adequacy	MSA
Kaiser-Meyer-Olkin	KMO

ABSTRAK

Walaupun EKS (Enterprais Kecil dan Sederhana) menjadi semakin penting dan pengetahuan dalam bidang antarabangsa semakin bertambah dengan pesatnya, penyelidikan empirik tentang penglibatan EKS Malaysia di luar negara masih terhad. Kajian EKS Malaysia di sektor pembuatan ini adalah satu usaha untuk memahami faktor-faktor yang mempengaruhi penglibatan EKS di luar Negara dan kesannya ke atas prestasi syarikat. Satu model penyelidikan telah dibentuk berdasarkan kajian-kajian yang lepas. Tujuan kajian ini adalah untuk melihat pertalian di antara keupayaan saingan, sikap pengurusan, pengalaman dan pengetahuan antarabangsa yang dimiliki oleh pengurusan dengan penglibatan EKS di luar negara dan sama ada ia memberi kesan kepada prestasi syarikat. Penyelidikan ini berasaskan kepada tinjauan sampel yang melibatkan 300 EKS dari sektor pembuatan. Dengan menggunakan kaedah soal selidik berstruktur, data bagi penyelidikan ini diperolehi melalui pos dan e-mail daripada EKS di negeri-negeri seperti Perak, Pulau Pinang, Kedah dan Perlis. Keputusan penyelidikan ini menunjukkan bahawa keupayaan saingan, sikap pengurusan dan, pengetahuan dan pengalaman antarabangsa tidak mempunyai perhubungan yang ketara dengan penglibatan EKS di luar negara. Saiz mempunyai kesan moderat ke atas perhubungan di antara pengetahuan dan pengalaman antarabangsa dengan penglibatan EKS di luar negara. Tetapi, penglibatan EKS di luar negara mempunyai perhubungan ketara dengan prestasinya. Pada masa yang sama, saiz mempunyai kesan moderat di antara pengetahuan dan pengalaman antarabangsa dengan prestasi EKS.

ABSTRACT

Despite the importance of SMEs and the increased in knowledge in the area of internationalization, empirical research on Malaysian SMEs in the area of internationalization has been limited. In an attempt to investigate the antecedents of internationalization that influence the performance of SMEs, this study focuses on SMEs in the Malaysian manufacturing sector. The conceptual framework is developed based on previous literature gaps on SME internationalization and firm performance. The purpose of this study is to examine the general relationship between competitive advantage, management attitude and international knowledge and experience vis-a-vis SME internationalization and whether internationalization affects their performance. The study was based on a sample survey consisting of 300 SMEs in the manufacturing sector. Using a structured questionnaire, the data were collected through the post from the SMEs located in the northern region of Peninsular Malaysia. The study showed that competitive advantage, management attitude and international knowledge and experience do not show a significant relationship with internationalization. The moderating effect was found for international knowledge and experience and innovative differentiation with regard to the internationalization when size was used as a moderating variable. A significant relationship was found between internationalization and performance. The moderating effect was found for international knowledge and experience with regard to performance when size was used as a moderating variable.

CHAPTER 1

INTRODUCTION

1.1 Introduction

During the past decade, popular terms used in economic circles have been “globalization”, “internationalization” and “liberalization”. Issues related to globalization, internationalization and liberalization have received a great deal of attention in recent research. Globalization has two levels of meaning (Shih, 2002). The first level is globalization in a geographical sense. The second level is that the firm attains international standards in its operations. Why is globalization important? Before economic conditions were liberalized, in a “protectionist” environment, a business could still survive even though it was poorly managed. However after liberalization, any international firm could arrive to compete with local firms. Succinctly, the economic globalization places enormous pressure on small and medium enterprises (SMEs) to internationalize speedily.

A study commissioned by the Organization for Economic Cooperation and Development (OECD) (1997) on the globalization of SMEs, provides evidence from 18 member countries that suggests SMEs are internationalizing more rapidly than in the past and provides evidence of small firms that became involved in international business activities almost from inception. Evidence of this phenomenon has emerged from studies of entrepreneurship and entrepreneurially led firms during the past decade (Bloodgood, Sapienza & Almeida, 1996; Coviello & Munro, 1992; McDougall, Shane & Oviatt, 1994; Turnbull, 1987).

Under the Eighth Malaysia Plan (2001-2005), the responsibilities of the SMEs to assist the nation's economy are very clear. The development allocation to support SME development in the Eighth Plan is RM1.1 billion, as shown in Table 1.1. The development thrust will focus on technology development, expanding industrial infrastructure and skill upgrading of SMEs. The allocation has increased more than 50 percent compared to Seventh Malaysia Plan. The Small and Medium Industry Development Plan (SMIDP) will chart the future development of the SMEs to provide the critical linkage in the development of a broad-based, globally competitive industrial sector.

Table 1.1
Development Allocation for Industrial Development, 2001-2005
(RM million)

Program	7MP		8MP
	Allocation	Expenditure	Allocation
Industrial Estates Development	591.7	534.7	248.0
Development of Industrial Infrastructure	126.7	88.3	95.0
SME Development	458.1	394.6	1091.8
Domestic Investment Fund	319.0	288.2	670.0
Rural Industries	133.3	130.1	140.0
Training and Consultancy Services	120.8	109.3	241.0
Investment in Heavy Industries	331.5	310.0	24.2
Implementation of Action Plan for Industrial Technology Development	92.2	82.2	78.5
Wafer Fabrication Project Fund	11.5	10.0	10.0
Total	2184.8	1947.4	2598.5

Note: 7MP – Seventh Malaysia Plan, 8MP – Eight Malaysia Plan
(Source: Adopted from Malaysia (2001))

In Malaysia, the growth and development of the SME sector is stipulated very clearly in the National Economic Policy and the Malaysian Development Plans (the five-year plans). Two main policy guidelines established are: (a) the SMEs should produce

quality and high value-added products and services for both domestic and export markets, and (b) the SMEs should increase productivity through the use of modern technology and management which will help to increase the competitiveness of the SMEs in the export market (Hashim, 2000a).

To support the development of SMEs, the Government established the Small and Medium Industries Development Corporation (SMIDEC) in 1996 to provide effective leadership in planning and overall coordination. In particular, SMIDEC was tasked to promote the development of indigenous SMEs that were efficient and competitive as well as capable of producing high value-added and quality products and services for the global market.

The manufacturing sector is expected to take the lead in contributing to the GDP (Gross Domestic Product) growth for 2003 expanding at a rate of 6.5 percent (SMIDEC, 2002). In 2001, the SMEs in the manufacturing sector contributed 15 percent to the total manufacturing output. Their contribution in 2001 increased marginally by 1.2 percent from RM50,230 million to RM50,817 million (SMIDEC, 2002). According to media releases by SMIDEC in 2002, the government has provided grants up to RM250,000 per company under the Productivity and Quality Improvement and Certification Scheme to enable the SMEs to certify their products and processes to be in conformance with the requirements of the importing countries (SMIDEC, 2002).

In the United States, SMEs make an important contribution to its economy and international community (Bowers & Alon, 2000). Some of the key contributions are: (a) 51 percent of the private sector output, (b) 97.5 percent of U.S. exports of goods in 1992 and, (c) 92.6 percent of exported manufacturing products are from the SMEs. These figures show that the SMEs are an important force in the U.S. economy.

Despite the purported benefits of internationalization for SMEs, the extant literature holds relatively less information on the factors influencing internationalization for Malaysian SMEs. Hashim (2000a) has attempted to provide a new research agenda for SMEs in Malaysia by highlighting the shortcomings of previous studies as well as the major issues and research areas that have yet to be rigorously examined. Hashim (2000a) has suggested that future research should investigate the relationship between modern management theories and the performance of SMEs in the rapidly developing economy.

Globalization pressure suggests that there is a need to study empirically why SMEs internationalize and how it affects their performance in the Malaysian environment. Therefore, the purpose of this study is to explore how competitive advantage, international knowledge and experience, management attitude and firm size determine the internationalization of the SMEs and whether internationalization affects firm performance in the Malaysian manufacturing sector.

1.2 Research Issues

SMEs are facing many internal barriers such as limited resources, difficulty in acquiring information, lack of managerial experience in exporting and weak formal planning systems; these problems can restrict their interest for internationalization (Karagozoglu & Lindell, 1998; Ali & Swiercz, 1991; Naidu & Prasad, 1994; Baird, Lyles & Orris, 1994). Internationalization requires new knowledge and information, new ways of advertising and selling, familiarity with foreign cultures and buying behavior and ways of doing business. Although economic motivations can play a critical role in SME decisions to internationalize, firms that strongly value learning from international experience are more likely to pursue exporting (Burpitt & Rondinelli, 2000).

Research on the exporting experience of small companies has explored a wide range of relevant issues: (a) the impact of firm size (Ali & Swiercz, 1991; Kaynak, Ghauri & Olofsson-Bredenlow, 1987; Czinkota & Johnston, 1983); (b) competitive advantages, managerial characteristics and expectations (Moini, 1995), and (c) firm characteristics (Bilkey & Tesar, 1977; Czinkota & Johnston, 1983).

Karagozoglu and Lindell (1998) identified several commonly cited motivations for a firm to internationalize. Their studies showed that small enterprises are more likely to export when global market opportunities are more promising than the domestic market, when they receive inquiries from potential foreign buyers and there is insufficient demand in the domestic market.

The Malaysian government has placed great interest in developing and expanding the growth of the SMEs for many years (Hashim, 2000a). The former Prime Minister, Datuk Seri Dr. Mahathir Mohamad, emphasized the important role of the SMEs in the economy during the launching of the Second Industrial Master Plan (New Straits Times, November 29, 1996). He stressed the importance of developing competitive Malaysian SMEs with a global orientation and world-class operation structure to ensure the sustainable and resilient growth of the manufacturing sector.

Market liberalization and digitization are forcing large corporations and the SMEs to operate beyond their national borders and compete with each other in foreign countries and new regions (Barkema, Baum & Mannix, 2002). In the changing, dynamic and uncertain world of the early 21st century, this process can be conceptualized as a search process in which internationalizing firms explore, perform fact findings, identify and probe new opportunities to accelerate performance. This notion is further supported by Barkema and Piaskowska (2002) that internationalization is a journey through a “rugged landscape” to optimize firm value.

The SMEs in Malaysia are experiencing the same scenario as in other countries. However, the level of pressure was not realized until recently when AFTA (Asean Free Trade Area) was implemented in 2003. This expansion experience will allow the SMEs in Malaysia to update their routines and their cognitive maps on how to operate in different cultural environments and identify the opportunities in foreign lands.

Recently, there has been much focus on the effects of the opening up of national borders and removal of trade barriers. SMEs may generally be weak relative to larger firms to face competition in international trade. The lower productivity and limited resources of the SMEs can become a disadvantage even though tariff barriers are removed.

Nevertheless, the pressure generated by wider competition has forced the SMEs to attempt to ensure their own survival by systematically improving their competitiveness and differentiating their products (Julien, Joyal & Deshaies, 1994). Definitely, the opening up of borders by participating in World Trade Organization (WTO) and AFTA will provide firms with new foreign market opportunities, bigger market shares and scales of economy.

For decades, researchers have debated whether firm performance is best served by incremental or radical change (Miller & Friesen, 1980, 1984; Tushman & Romanelli, 1985). The changes that might take place are foreign expansions through acquisitions and various changes in organizational structures, strategies and technology deployment. Besides these, the traditional advantages of SMEs, particularly in the areas of flexibility, adaptability, autonomy and speed of adjustment, will continue to remain as valuable assets to face the challenges ahead (Sieh, 2000).

For example, Julien et al. (1994) show that the SMEs in Canada have taken numerous actions within the wider framework of economic globalization to respond to

the 1988 Free Trade Agreement (FTA) between Canada and the United States. The authors reveal that the SMEs not only perceive the reduction of tariff barriers as a motivation for internationalization, but realize that the main purpose is to adapt to world competition. The authors found that some of the strategies SMEs adapt to position themselves in the world competition were (1) product specificities, (2) new technologies and innovations, (3) marketing and distribution channels, and (4) changes in organizational structure.

Kumaraguru's (1999) study on exporting firms operating in the northern region of Peninsular Malaysia shows that export market competitiveness, the international experience and managerial commitment of firms, product technical complexity and establishments are the key determinants of export marketing strategy. The results show that the experience and commitment of firms to internationalize positively influence the product, promotion and pricing adaptation strategy to build competitive advantage. Furthermore, Calof (1994) has suggested the exploration of variables such as the management's attitude towards risks and the benefits of exporting and experiential international knowledge to further understand the export behavior of the SMEs.

The above research issues provide plausible explanations to explore the antecedents of the internationalization of the SMEs and to examine whether internationalization enhances the performance of the SMEs. The following section presents the problem statement of this study.

1.3 The Problem Statement

This study investigates the variations in performance among the SMEs that internationalize and the antecedents of internationalization among Malaysian SMEs. An attempt was made to understand Malaysian SMEs involvement in internationalization and the factors that influence the variations in internationalization. The study also focuses on the moderating effect of size among SMEs on the internationalization and performance.

1.4 Research Objectives

The research objectives of this study are as follows:

- (a) to understand the extent of the internationalization of the Malaysian SMEs,
- (b) to understand whether competitive advantage, the management's international knowledge and experience, and its attitude determine internationalization,
- (c) to examine the moderating effect of firm size on internationalization and performance and
- (d) to understand the relationship between internationalization and performance.

1.5 Research Questions

Based on the above problem statement, the research questions of this study will be as follows:

- (a) What is the level of internationalization of Malaysian SMEs?
- (b) How the international knowledge and experience of SME management affect their internationalization?

- (c) What is the management's attitude towards internationalization in the Malaysian SMEs?
- (d) How competitive advantage in the domestic market determine the level of internationalization?
- (e) How firm size affect internationalization?
- (f) Is the level of internationalization related to performance?

1.6 Significance of the Study

Intensifying global competition has propelled myriad SMEs across the world to join forces to expand into foreign markets and challenge their larger rivals as never before (Barkema, Baum & Mannix, 2002). Therefore, this study will examine the antecedents of internationalization of the manufacturing SMEs in Malaysia and analyze its relationship with SME performance. This study will be useful to enlighten strategic managers as to what strategies to engage and implement to help SMEs to internationalize in future. In summary, below is a list of why the study is significant:

1. This study will help the SMEs in Malaysia to understand whether competitive advantage will help firms to internationalize and improve their performance.
2. Empirical findings will help to identify to what extent international knowledge and experience and management attitude will help firms to internationalize in future.
3. The findings of this study will help to increase awareness among the general managers of the SMEs to invest in training programs that are required for internationalization.

4. The findings will show whether Western literature is supportive for Malaysian SMEs in the area of internationalization.
5. The use of index of internationalization to measure internationalization will contribute to the literature.

1.7 Scope of the Study

The unit of analysis of this study is the SME in the manufacturing sector in Malaysia. This study encompasses the SMEs in the northern region of Peninsular Malaysia: Pulau Pinang, Kedah, Perlis and Perak. It focuses on three independent variables such as competitive advantage, management attitude and international knowledge and experience that affect the internationalization and performance of SMEs. The firm size is a moderating variable in this study.

1.8 The Operational Definition of Key Variables

1.8.1 Small and Medium Enterprises (SMEs)

The Ministry of International Trade and Industry (MITI) redefined the SMEs in the manufacturing sector to include companies with a larger operating capacity (New Straits Times, January 19, 1998). According to the new definition:

1. A small-scale firm is a company with less than 50 full-time employees and with an annual turnover of not more than RM10 million.
2. A medium-scale enterprise is a company with between 51 and 150 employees and with an annual turnover of between RM10 million and RM25 million.

The SMIDP also defines SME as a firm with an annual sales turnover of not exceeding RM25 million or full time employees of not exceeding 150 (SMIDEC, 2002). Therefore, the SMEs in this study are observing the above two criteria.

1.8.2 Internationalization

Internationalization is the extent to which a firm is involved in international business. It includes exporting, the presence of foreign subsidiaries, shares ownership by foreigners and the appointment of foreigners in the organizational structure.

1.8.3 Performance

Firm performance refers to the level of success of the firm. For this study, performance is measured in terms of the average sales growth, the average rate of profit or return on sales (ROS) and people turnover. These performance measurements are formulated into an index of performance.

1.8.4 Competitive Advantage

According to Barney (1991), a firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitor; the latter is also unable to duplicate the benefits of this strategy. Barney (1995), in a further refinement of his definition, mentioned that a firm's competitive advantage potential depends on the value, rareness and imitability of its resources and capabilities. In this study, competitive advantage is defined as a value creating strategy that enables internationalization of SMEs.

1.8.5 Management Attitude

Cavusgil and Nevin (1981) and Rosson and Stanley (1987) outlined the need for a favorable managerial orientation toward internationalization in terms of perceived risks, opportunities and costs of such a venture. In this research, management attitude referred to the decision makers' subjective evaluation of problems and opportunities associated with SME internationalization.

1.8.6 International Knowledge and Experience

According to Vida, Reardon and Fairhurst (2000), the accumulation of experience in foreign markets is considered essential to reduce the perceived risk which increases the motivational level for internationalization. International knowledge is one of the key determinants of SME internationalization. International knowledge can be defined as knowledge in foreign ventures, foreign market information, multinational culture and the buyers' behavior in the foreign market. International experience, on the other hand, refers to the dealings with foreign business partners and the formation of cooperative agreements with foreign agents.

1.8.7 Firm Size

Size reflects how big the firm is and usually is reflected through sales volume, the production capacity or the number of employees. For this study, firm size is represented by the sales volume.

1.8.8 The Manufacturing Sector

The manufacturing sector in this study refers to the economic sector that is involved in activities such as processing, assembling and producing final products for the local market and for export.

1.9 The Organization of Chapters

This thesis contains five chapters. Chapter 1 explains the reasons for internationalization of SMEs. This chapter also explains the research problem, some of the issues in research, the research objectives, the significance of research, the research scope and terms used in this research. Chapter 2 focuses on the literature review of the Malaysian SMEs, internationalization, firm performance, competitive advantage, management attitude, international knowledge and experience and firm size. Basically, there will be a brief overview of empirical researches that underpin the research questions. Chapter 3 explains the research methodology which encompasses the sample procedure, research measurements and the statistical analyses used in the study. Chapter 4 presents the data analyses using descriptive statistics, factor analysis, reliability analysis, sampling adequacy and hypotheses testing using regression analysis. Chapter 5 provides the research discussions and presents the conclusions. In addition, it includes implications from the theoretical and practical points of view, limitations of the study and some suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, the literature on SMEs, internationalization, firm performance, competitive advantage, management attitude, international knowledge and experience and firm size are reviewed. The first part describes the development of the SMEs in Malaysia and the literature on the variables described above. The second part outlines the gaps in the literature and followed by the theoretical framework of this study. The third part reviews literature on the constructs used in the study and the prior research in this field.

2.2 Small and Medium Enterprises in Malaysia

The interest in the SMEs in Malaysia has witnessed a significant growth over the years. It operates in almost every key and major industry. This section will explain the literature pertaining to Malaysian SMEs.

Hashim and Abdullah (2000) redefined the SMEs after understanding the weaknesses and inconsistencies of the existing definitions given by various government agencies and the private sector. A framework towards developing more uniform and consistent definitions of the SMEs in the various industries in Malaysia has been proposed. The framework takes into consideration both the qualitative and quantitative characteristics of SME. The quantitative criteria are (a) a firm that employs 51 to 300 full time employees and (b) has a paid-up capital of RM10 million to RM49 million. The

qualitative criteria are (a) it is actively managed by its owners, or in another words, “owner-managed and family business”, (b) it is highly personalized (i.e. with an owner’s preferred management style), (c) it is largely local in its area of operation, and (d) it is largely dependent on internal sources of capital to finance its growth. The rationale behind the inclusion of these four qualitative characteristics is to establish the entrepreneurial orientation that will reflect the general ownership profile of SMEs in Malaysia.

On the other hand, under the Akta Koordinasi Perindustrian 1975 (amendments 1986), Akta Promosi Pelaburan 1986 and the financial borrowing guide of Bank Negara, SMEs are defined as businesses which possess net assets and equity not more than RM2.5million (Malaysia, 1998). Nevertheless, qualitative criteria are very frequently used to measure SMEs (Meredith & Grant, 1982).

In his paper, Hashim (2000b) explained the historical development of the SMEs in Malaysia. This may be best observed in the National Economic Policy and Malaysian Development Plans. Ever since the First Malaysia Plan (1966 to 1970), the government has recognized the importance of the SMEs to the national economy. From the Fifth Malaysia Plan (1986 to 1990) onwards, the government started to transform the manufacturing sector from a domestic orientation to internationalization (Hashim, 2000b).

Hashim (2000b) further elaborated on the change in the government's development policy guidelines for the SMEs. The two key guidelines developed by the National Development Council were that the SMEs should produce quality and high value-added products and services for both the domestic and export markets. Besides that, they should increase productivity through the use of modern technology and management which will help to increase their competitiveness in the export market.

Hashim (2000b) acknowledged the growing number of SMEs in Malaysia. The actual number of SMEs in Malaysia has, however, yet to be determined. Based on the statements made by various organizations and ministries over the past decade, the total SMEs could be in the range of 10,000 to 30,000. Nevertheless, MITI expects the SME sector to contribute more between the period of 2000 and 2020. The SMEs are expected to contribute 50 percent of the gross domestic product (GDP) in 2020 (Hashim, 2000b).

Zulkifli and Jamaluddin (2000) have examined the existing practice in strategy, performance measurement being used and problems faced by local SMEs. The results showed that there are lack of skills and knowledge in organizing effective manufacturing and business strategy development. About 42% of the SMEs that were interviewed had prioritized quality and cost as their best weapons to compete regionally. The findings indicated that SMEs lacked a documented strategy and proper techniques to formulate develop and measure performance. Most of the companies could not plan more than five years, the long-term strategies which are crucial for internationalization. Zulkifli and Jamaluddin (2000) commented that SMEs in Malaysia are very far behind compared to

SMEs in Asian countries, such as, Taiwan, Korea or Singapore, in terms of innovation in design, speed of delivery and, huge choices and customized products for customers.

Abdullah's (1997) study on manufacturing SMEs located in Penang, indicated that various levels of perceptions, efforts and attitude by management towards training programs. The study revealed a number of interesting findings such as majority of the entrepreneurs realize the need for training for their employees; huge percentage realize the existing training programs are useful and relevant to their requirements and majority of the SMEs are not allocating budget for organizing training programs. The results suggest that efforts towards training among SME's entrepreneurs are still limited despite the greater force for internationalization by the government.

Abdul Talib and Md. Salleh (1997) have pointed out some critical evaluation concerning the relationship between firm size and attitudes toward exporting. The results demonstrated that SMEs have stronger tendency towards exporting activities than large sized firms. SMEs are also found to be actively exploring market potential in the international arena. In other words, these firms are looking for broader market for their products. Obviously, all firms in the study believe that exporting is a desirable activity and can contribute significantly to the firm's growth and profit.

On the other hand, anecdotal evidence has shown that due to the financial crisis, many SMEs have left the industry (Ainuddin & Junit, 2001). Therefore, for the past two decades, studies on Malaysian entrepreneurs have focused on the personalities of

entrepreneurs to understand on their personality traits and risk preference (Abdul Rashid, 1983; Ismail, 1983; Zaidatol & Habibah, 1997). Moreover, Malaysian researchers have also started looking at the behavioral and operational aspects of the entrepreneur's companies (Nik Rahimah & Aliah Hanim, 1996).

Nevertheless, the commitment of the government to establish strong, viable and modern export oriented manufacturing companies is clearly shown in the Second Industrial Master Plan (IMP2). Besides that, the (SMIDEC) has been formed to implement various programs and to provide financial assistance to promote their growth in the domestic as well as export markets.

Programs for SME development in the manufacturing sector have been formulated to address issues experienced by the SMEs in marketing, finance, technology and skilled manpower (SMIDEC, 2002). The programs are focused upon encouraging domestic investments, increasing productivity and quality, skills upgrading, enhancing industrial linkages, the adoption of technology and the utilization of information and communication technology (ICT) as a means to achieve greater efficiency, expanding markets through export promotions and enhancing access to funding.

Besides that, the SMIDEC has encouraged the SMEs to embrace the latest technologies that serve to reach the non-traditional markets. SMEs have started to utilize internet technology and ICT which will enable them to become global suppliers. Some of

the new programs engaged by the SMIDEC are Headstart 500, the SME Expert Advisory Panel (SEAP) and the SME Information and Advisory Centre (SMIDEC, 2002).

According to the Federation of Malaysian Manufacturers Economic Policy Paper No. 6/95 on the “Principal Findings of FMM 1995 Annual CEO Survey on Performance, Problems and Prospects of the Manufacturing Sector” which was conducted in February, 1995 and compiled responses from a sample of 95 manufacturing companies covering 14 industry groups, only 35.1 percent of the respondents were exporting at least 50 percent of their output. Nevertheless, the government has emphasized programs for the expansion, improvement and modernization of the SMEs through the introduction of incentive systems and research and development (R&D) for more than a decade (Malaysia, 1986).

Hashim (2000a) developed an integrative framework to examine and foster understanding of the strategic factors for managing SMEs successfully. The framework suggested that three factors should fit perfectly to make the SMEs successful - entrepreneurial characteristics, the organizational context and the external environment. He also highlighted the strengths and weaknesses of the SMEs in Malaysia. All SMEs in various sectors possess strengths and weaknesses. Some of the key strengths of the SMEs are the ability to produce economic output, provide employment opportunities, generate regional income, provide savings, be involved in training development, stimulate competition, provide aid to large firms, encourage innovation and flexibility and become breeding grounds for new entrepreneurship ventures and entrepreneurs. Their

weaknesses are lack of capital and credit facilities, shortage of skilled workers, shortage of raw materials, inadequate infrastructure, lack of managerial and technical expertise, marketing constraints and a limited application of new technology.

Hashim, Mohamad and Wafa (2001) in their empirical study on 100 domestic and export-oriented SMEs in the Malaysian manufacturing sector showed that perceived distinctive capabilities differ among domestic and export-oriented SMEs. Distinctive capabilities are defined as some resource, skill, activity or capability that a business is uniquely good at in comparison with rival firms. It proves that the export-oriented SMEs have higher levels of perceived distinctive capabilities. In other words, distinctive capabilities may have an impact on export entry decisions of SMEs.

The review of literature about the SMEs in Malaysia shows there is a need to explore the antecedents of internationalization and performance. This will help in a manifestation of the holistic approach of the government to internationalize as many SMEs as possible.

2.3 Internationalization

This section divided into two parts. First, theoretical aspects of internationalization are explained to ground this study and later the recent findings in journals are outlaid.

A scrutiny of the established models of internationalization is timely. There are two schools of thoughts to describe the process of internationalization: the Uppsala models (U-models) and the Innovation-Related Internationalization models (I-models). The U-model was developed by Johanson and Wiedersheim-Paul (1975) and Johanson and Vahlne (1977). The model describes the internationalization process as a gradual acquisition, integration and use of knowledge about foreign markets and operations. In the I-model, conceptualized by Cavusgil (1980), export involvement is operationalized by the ratio of export sales to total sales to reflect the extent of a firm's dependence on foreign markets. It was further supported by Cavusgil (1980) who had proposed five stages of internationalization such as domestic marketing, pre-export, experimental involvement, active involvement and committed involvement. Eriksson, Johanson, Majkgard and Sharma (1997) argued that both U-model and I-model are similar, however, they are behavioral in nature and in that experiential knowledge is a prominent factor in the internationalization process.

Eriksson et al. (1997) further explained that the behavioral model of internationalization is based on the theory of the growth of the firm and the behavioral theory of the firm and asserts that the internationalization of a firm is an incremental process. The model rests on the assumption that firms have imperfect access to information and explains internationalization as a process of increasing experiential knowledge.

Eriksson et al. (1977) critically postulated two dimensions of international expansion in the internationalization model: psychic distance and established chain. The model theoretically postulates that as the psychic distance between market increases, the more difficult it becomes for firms to collect and interpret incoming information properly. The psychic distance between the home and foreign markets affects market selection as well as choice of entry mode. Hornell, Vahlne and Wiedersheim-Paul (1972) found that the firms first entered markets at a short psychic distance and later went into more distant markets. The model further postulates that in each country, the firm increases its commitment incrementally as it learns about the market. This is manifested in a sequence of operational forms labeled the establishment chain, from exporting to establishment of a marketing subsidiary and followed by foreign production.

Bartlett and Ghoshal (2000) have identified two main motivations for firms' internationalization: traditional motivations and emerging motivations. Among the earliest motivations that drove companies to invest abroad was the need to secure key supplies, especially minerals, energy, and scarce raw material resources. Another strong trigger of internationalization could be described as the market seeking behavior. This motivation was particularly strong in companies that had some intrinsic advantage, typically related to their technology or their brand recognition that gave them some competitive advantage in offshore markets. Another traditional and important trigger of internationalization was the desire to access low-cost factors of production. For example, the availability of lower-cost capital also became a strong force for internationalization.

These three motives were the main traditional driving forces behind the overseas expansion of a vast majority of firms.

Bartlett and Ghoshal (2000) further outlined the emerging motivations for firm internationalization. In many cases, the new motivations were driven by a set of economic, technological, and social developments that made internationalization essential for a company to survive in particular businesses. For example, successive rounds of technological change brought about by the adoption of integrated circuits, auto-insertion machines, printed circuit boards, and computerized assembly and testing raised the efficient scale for production of color television sets from about half a million sets a year to over three million sets. As a result, companies that had historically focused only on their domestic markets had to either become international or go out of business since few countries were large enough to support production at such scale by individual companies.

Vernon (1966), in his well-known product cycle theory, suggests that the starting point for the internationalization process is typically an innovation that a company creates in its home country. In the first phase of exploiting the development, the company will build production facilities in its home market not only because this is where its main customer base is located, but also because of the need to maintain close linkages between research and production in this phase of the development cycle. As the product matures and production processes become standardized, the company enters a new stage. To minimize competition locally and also to meet the foreign demand more effectively, the innovating firm typically sets up production facilities in the exporting countries. Finally,